

# Permitting decisions

## Bespoke permit

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We have decided to grant the permit for Methwold Airfield Poultry Unit operated by Nova Farming Ltd.

The permit number is EPR/ZP3936YE.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

### Purpose of this document

This decision document provides a record of the decision making process. It summarises the decision making process in the decision checklist to show how all relevant factors have been taken in to account. This decision document provides a record of the decision making process. It:

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision checklist](#) to show how all relevant factors have been taken into account
- shows how we have considered the [consultation responses](#).

Unless the decision document specifies otherwise we have accepted the applicant's proposals. Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

## Key issues of the decision

### 1) New Intensive Rearing of Poultry or Pigs BAT Conclusions document

The new Best Available Techniques (BAT) Reference Document (BReF) for the Intensive Rearing of Poultry or Pigs (IRPP) was published on the 21 February 2017. There is now a separate BAT Conclusions document which will set out the standards that permitted farms will have to meet. Now that the BAT Conclusions are published, all new installation farming permits issued after the 21 February 2017 must be compliant in full from the first day of operation.

There are some new requirements for permit holders. The conclusions include BAT Associated Emission Levels (BAT-AELs) for ammonia which will apply to the majority of permits as well as BAT-AELs for nitrogen and phosphorous excretion. For some types of rearing practices stricter standards will apply to farms and housing permitted after the new BAT Conclusions are published. There are 33 BAT conclusion measures in total within the BAT Conclusions document dated 21 February 2017.

A BAT-AEL provides us with a performance benchmark to determine whether an activity is BAT. The following is a more specific review of the measures the Applicant has applied to ensure compliance with the above key BAT measures.

<b>BAT Measure</b>	<b>Applicant Compliance Measure</b>
BAT 3 – nutritional management for nitrogen excretion.	BAT-AEL for broilers 0.2 to 0.6kgN/animal place/yr.
BAT 4 - nutritional management for phosphorous excretion.	BAT-AEL for broilers 0.05 to 0.25kgP/animal place/yr.
BAT 24 – monitoring of emissions and process parameters for total nitrogen and phosphorous excreted.	Table S3.3: Process monitoring. This table requires the Applicant to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 25 - monitoring of emissions and process parameters for ammonia emissions.	
BAT 27 - monitoring of emissions and process parameters for dust emissions.	
BAT 32 – ammonia emissions from poultry houses for broilers.	BAT-AEL for broilers is 0.01 to 0.08kgNH <sub>3</sub> /animal place/yr.

A BAT-AEL provides us with a performance benchmark to determine whether an activity is BAT. The new BAT Conclusions include a set of BAT-AELs for ammonia emissions to air from animal housing for broilers and therefore an ammonia emission limit value has been included within the permit. Some of the ammonia BAT-AELs allow a higher value for existing plant. 'New plant' is defined as plant first permitted at the site of the farm following the publication of the BAT conclusions. 'Existing plant' is defined in the BREF as any plant that is not a 'new plant'. All new bespoke applications issued after the 21 February 2017, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL.

With regards to specific BAT measures that the Applicant has to ensure compliance with, BAT 27 (monitoring of dust emissions and process parameters) will be required. The requirements are given in Table S3.3 - process monitoring requirements – and the Applicant is required to undertake relevant monitoring that complies with these BAT conclusions.

The Applicant confirmed that the new installation has been constructed to and complies in full with all the BAT conclusion measures. The Applicant has confirmed their compliance with the BAT conditions for the new housing and that the installation will meet the new BAT AEL's in their application (Non-Technical Summary document ref: Nova/Np/07) dated 20 November 2017 as well as the revised document Non-Technical Summary document ref: Nova/Np/07/R1 dated 23 January 2018.

## **2) Industrial Emissions Directive (IED)**

The Environmental Permitting (England and Wales) (Amendment) Regulations 2013 were made on the 20 February and came into force on 27 February 2013. These Regulations transpose the requirements of the IED. This permit implements the requirements of the European Union Directive on Industrial Emissions. As a result of the requirements of the IED, all permits are now required to contain a condition relating to protection of soil, groundwater and groundwater monitoring. However, the Environment Agency's Guidance states that it is only necessary for the Applicant to take samples of soil or groundwater and measure levels of contamination where there is evidence that there is, or could be existing contamination and:

- The environmental risk assessment has identified that the same contaminants are a particular hazard; or
- The environmental risk assessment has identified that the same contaminants are a hazard and the risk assessment has identified a possible pathway to land or groundwater.

The Guidance further states that it is not essential for the Applicant to take samples of soil or groundwater and measure levels of contamination where:

- The environmental risk assessment identifies no hazards to land or groundwater; or
- Where the environmental risk assessment identifies only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or
- Where the environmental risk assessment identifies hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

The site condition report (SCR) for Methwood Airfield Poultry Unit (dated 13 November 2017) demonstrates that there are no hazards or likely pathway to land or groundwater and no historic contamination on site that

may present a hazard from the same contaminants. Therefore, on the basis of the risk assessment presented in the SCR, we accept that they have not provided base line reference data for the soil and groundwater at the site at this stage and although condition 3.1.3 is included in the permit no groundwater monitoring will be required.

### **3) Odour**

Intensive farming is by its nature a potentially odorous activity. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance ([http://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/297084/geho0110brsb-e-e.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297084/geho0110brsb-e-e.pdf)).

Condition 3.3 of the environmental permit reads as follows:

"Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the Applicant has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour."

The odour risk assessment for the Installation provided with the Application lists key potential risks of odour pollution beyond the Installation boundary. These activities are house clean out, movement of feed/feed delivery, house ventilation, litter management and used litter, carcass disposal, dirty water management and abnormal operations. There are no sensitive receptors within 400m of the installation boundary.

We have assessed the H1 risk assessment and conclude that the Applicant has followed the Environment Agency guidance for Intensive Farm installations. We are satisfied that all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of odour pollution/nuisance.

### **4) Noise**

Intensive farming by its nature involves activities that have the potential to cause noise pollution. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance. Under section 3.4 of this guidance a Noise Management Plan (NMP) must be approved as part of the permitting determination, if there are sensitive receptors within 400m of the Installation boundary. Condition 3.4 of the Permit reads as follows:

"Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the Applicant has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan, to prevent or where that is not practicable to minimise the noise and vibration".

We have assessed the H1 risk assessment for noise and conclude that the Applicant has followed the guidance set out in EPR 6.09 Appendix 5 'Noise management at intensive livestock installations'. We are satisfied that all sources and receptors have been identified, and that the proposed mitigation measures will minimise the risk of noise pollution/nuisance. There are no sensitive receptors within 400m of the installation boundary.

### **5) Biomass Boilers**

The installation will include two biomass boilers with a net rated thermal input of 1.095MW each (aggregated value is 2.19MWth). The Environment Agency has assessed the pollution risks and has concluded that air emissions from small biomass boilers are not likely to pose a significant risk to the environment or human health providing certain conditions are met. Therefore a quantitative assessment of air emissions will not be required for poultry sites where:

- the fuel will be derived from virgin timber, miscanthus or straw, and;
- the biomass boiler appliance and installation meets the technical criteria to be eligible for the Renewable Heat Incentive, and;
- the aggregated boiler net rated thermal input is less than or equal to 4MWth, and no individual boiler has a net thermal input greater than 1MWth, and;
- the stack height must be a minimum of 5m above the ground (where there are buildings within 25 metres the stack height must be greater than 1m above the roof level of buildings within 25m (including building housing boiler(s) if relevant) and:

- there are no sensitive receptors within 50m of the emission point(s).

This is in line with the Environment Agency’s document “Air Quality and Modelling Unit C1127a Biomass firing boilers for intensive poultry rearing”, an assessment has been undertaken to consider the proposed addition of the biomass boilers.

Our risk assessment has shown that the biomass boilers should meet the requirements of the criteria above, and are, therefore, considered not likely to pose a significant risk to the environment or human health and no further assessment is required. The exceedance of the 1MW for each biomass boiler criteria stated above is not considered significant as this is only by a value of 95kW and the Environment Agency’s assessment of pollution risks from small biomass boilers has used a ‘worst case’ modelling scenario.

In accordance with the Environment Agency’s Air Quality Technical Advisory Guidance 14: “for combustion plants under 5MW, no habitats assessment is required due to the size of combustion plant”. Therefore this proposal is considered acceptable and no further assessment is required. The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

Wood ash and/or soot is not deemed hazardous and can be disposed of as normal waste. The boilers are 87% efficient and have very little ash produced, approximately 10kg ash per boiler per week when in peak use. The predicted NOx concentration is 125mg/Nm<sup>3</sup>, the CO concentration is 481mg/Nm<sup>3</sup> and the PM10 (dust) concentration is 39mg/Nm<sup>3</sup> all at 10% oxygen.

## 6) Ammonia

There are two Special Area for Conservation (SAC) within 7.1km, one Special Protection Areas (SPA) within 2.0km, five Sites of Special Scientific Interest (SSSI) within 5.2km and two Local Wildlife Sites (LWS) within 2.2km of the facility.

### Assessment of SAC and SPA Sites

If the Process Contribution (PC) is below 4% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment. Initial screening using the Ammonia Screening Tool assessment spreadsheet v4.5 (AST) has indicated that the Norfolk Valley Fens and Breckland SACs both screen out at CLe 1 due to their distance from the site. Therefore, it is possible to conclude that there is not a potential risk of damage at the sites from this installation and no further action is required.

For Breckland SPA initial screening using the AST spreadsheet has indicated that the PC as a % of the CLe (CLe 3) is between 4% and 20%.

**Table 1: Breckland SPA Screening Assessment**

Ammonia	N Deposition	Acid Deposition	PC Ammonia	PC N Deposition	PC Acid Deposition
3ug/m <sup>3</sup>	5kgN/ha/yr	0.536keq/ha/yr	4.0%	12.5%	8.4%

This requires an in-combination assessment as there are several other intensive farming installations acting in-combination with this facility.

**Table 2: In-combination Assessment**

Installation	PC N Deposition	PC Acid Deposition
Methwold Airfield Poultry Unit	12.5%	8.4%
All other in-combo intensive farming installations	5.5%	0%
<b>Totals:</b>	<b>18.0%</b>	<b>8.4%</b>

The in-combination assessment concludes that the PC as a % of the CLo for N deposition and acid deposition is <20%. Therefore, detailed modelling is not required and no further assessment is required. An Habitats Directive assessment has been completed for information for Natural England by the Environment Agency.

In addition, Natural England were consulted during the Planning Application stage and agreed that the onsite mitigation measures will be likely to result in a substantial reduction in ammonia emissions and were therefore satisfied that the proposal is not likely to significantly affect Breckland SPA either alone or in-combination.

### Assessment of SSSI

If the PC is below 20% of the relevant CLe or CLo then the farm can be permitted with no further assessment. Initial screening using the AST spreadsheet v4.5 has indicated that the Breckland Farmland, Breckland Forest, The Brinks Northwold, Weeting Heath and Cranwich Camp SSSIs all screen out at CLe 1 due to their distance from the site. Therefore, it is possible to conclude that there is not a potential risk of damage at the sites from this installation and no further action is required.

Also, Natural England were consulted during the Planning Application stage and agreed that the onsite mitigation measures will be likely to result in a substantial reduction in ammonia emissions and were therefore satisfied that the proposal is not likely to significantly affect the SSSIs. A CRoW Act assessment has been completed for information by the Environment Agency.

### Assessment of LWS:

The following trigger thresholds have been applied for the assessment of non-statutory LWS:

- If PC is <100% of relevant CLe or CLo then the farm can be permitted (H1 or ammonia screening tool)
- If PEC < CLe or CLo then the farm can be permitted
- If further modelling shows PC <100%, then the farm can be permitted.

Initial screening using the AST spreadsheet v4.5 has indicated that the Cut-off Channel (Feltwell) and the Cut-off Channel (Methwold Hythe) LWSs screen out at CLe 1 due to their distance from the site. Therefore, it is possible to conclude no damage and that no further assessment is necessary.

## Decision checklist

Aspect considered	Decision
<b>Receipt of application</b>	
Confidential information	A claim for commercial or industrial confidentiality has not been made. The decision was taken in accordance with our guidance on confidentiality.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on confidentiality.
<b>Consultation</b>	
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. The application was publicised on the GOV.UK website. We consulted the following organisations: <ul style="list-style-type: none"><li>➤ Local Authority – Planning and Environmental Health</li><li>➤ Health and Safety Executive</li><li>➤ Natural England.</li></ul> No responses were received.
<b>Operator</b>	
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on legal operator for environmental permits.

Aspect considered	Decision
<b>The facility</b>	
The regulated facility	We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility'. The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.
<b>The site</b>	
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility. The plans are included in the permit.
Site condition report	<p>The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports.</p> <p>The site condition report (SCR) for Methwold Airfield Poultry Unit (dated 13 November 2017) demonstrates that there are no significant hazards or likely pathways to land or groundwater and no historic contamination sources on site that may present a significant risk. Therefore, on the basis of the assessment presented in the SCR the Environment Agency accepts that no baseline reference data needs to be provided for the site soil and groundwater conditions as part of application EPR/ZP3936YE/A001.</p>
Biodiversity, heritage, landscape and nature conservation	<p>The application is within the relevant distance criteria of site of nature conservation and habitats. We have assessed the application and its potential to affect all known sites of nature conservation and habitats identified in the nature conservation screening report as part of the permitting process.</p> <p>We consider that the application will not affect any sites of nature conservation and habitats identified. In accordance with our guidance, as there are statutory sites within 10km of the installation, we are required to consult Natural England. We have completed an Appendix 4 CRoW Act Assessment for the SSSIs and an Appendix 11 Habitats Directive Assessment for the SACs and SPA for auditing purposes. This was done on 24 January 2018, and are recorded on the public register.</p> <p>In accordance with the Environment Agency's Air Quality Technical Advisory Guidance 14: "for combustion plants under 5MW, no habitats assessment is required due to the size of combustion plant". Therefore this proposal is considered acceptable and no further assessment is required.</p>
<b>Environmental risk assessment</b>	
Environmental Impact Assessment	<p>In determining the application we have considered the Environmental Statement. We have also considered the planning permission and the committee report approving it. Feltwell Parish Council strongly objects to the potential smell the poultry unit could create. There are conditions within the permit that will address odour from the installation if it becomes a substantiated nuisance.</p> <p>Also, the Environment Agency in their consultation response concluded that the airfield presented a risk of contamination that could be mobilised during construction to pollute controlled waters. Controlled waters are particularly sensitive in this location because the proposed development site is within 200m of a known licensed groundwater abstraction and is located upon a Principal Chalk Aquifer. However, it is considered that planning permission could be granted to the proposed development as submitted subject to the inclusion of conditions relating to contamination and</p>

Aspect considered	Decision
	<p>pollution control.</p> <p>Environmental Health reviewed the standards for particulates (PM10) and the potential effects on the nearest receptors identified. Checks on the risk of exceeding the 24 hour mean PM10 using the screening methodology in Local Air Quality Management Technical Guidance (TG16, DEFRA April 2016) suggests that the process contribution to PM10 is &lt;math&gt;&lt;1\mu\text{g}/\text{m}^3&lt;/math&gt; at the nearest sensitive receptor. This indicates that there is a very low risk of exceeding the 24hour mean PM10 objective at the nearest sensitive receptor as a result of emissions from the poultry farm.</p>
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory.
<b>Operating techniques</b>	
General operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility. The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.</p> <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs.</p>
<b>Permit conditions</b>	
Raw materials	We have specified limits and controls on the use of raw materials and fuels. We have specified that only virgin timber (including wood chips and pellets), straw, miscanthus or a combination of these, are acceptable. These materials are never to be mixed with or replaced by, waste.
Emission limits	<p>BAT-AELs based on the recently published BAT Conclusions have been set in the permit for the following substances:</p> <ul style="list-style-type: none"> <li>➤ ammonia</li> <li>➤ nitrogen</li> <li>➤ phosphorous.</li> </ul> <p>Please refer to the <a href="#">key issues section</a>.</p>
Monitoring	With the publication of the IRPP BAT Conclusion Document, we have included monitoring for the parameters listed in the permit, using the methods detailed and to the frequencies specified. These monitoring requirements have been added in order to comply with the IRPP BAT Conclusion Document and are not related to any perceived issues with the operation of the installation.
Reporting	With the publication of the IRPP BAT Conclusion Document, we have specified reporting in the permit. These reporting requirements have been added in order to comply with the IRPP BAT Conclusion Document and are not related to any perceived issues with the operation of the installation
<b>Operator competence</b>	
Management system	There is no known reason to consider that the operator will not have the management

Aspect considered	Decision
	system to enable it to comply with the permit conditions. The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Relevant convictions	The Case Management System and National Enforcement Database have been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
<b>Growth Duty</b>	
Section 108 Deregulation Act 2015 – Growth duty	<p>We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to vary this permit. Paragraph 1.3 of the guidance says:</p> <p>“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”</p> <p>We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.</p> <p>We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.</p>



## Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

### Responses from organisations listed in the consultation section

<b>Response received from:</b> Borough Council of King's Lynn and West Norfolk – Environmental Quality Community Safety and Neighbourhood Nuisance dated 21 February 2018, ref: 18/00602.
<b>Brief summary of issues raised</b>
<p>Although a specification is given for the two biomass boilers no assessment is given to show whether the emissions will be significant at the nearest receptors. However, due to the distance from residential properties it is not anticipated that there will be significant noise and odour issues, however these aspects still need to be managed sufficiently in order to ensure that problems do not arise.</p> <p>The Non Technical Summary (Document Ref Nova/NP/07/R1) states that there will also be a Noise and Vibration Management Plan. This is not included in the documents submitted with the application so it may be necessary for this to be subject to a condition if the permit is granted.</p>
<b>Summary of actions taken or show how this has been covered</b>
<p>AQMAU has undertaken worst case modelling for small scale biomass boilers to provide criteria for which a biomass boiler screens out for human health purposes. This has been discussed further in this decision document.</p> <p>A noise risk assessment was included within the application. Where there are no sensitive receptors within 400m of the facility we do not automatically request a site specific noise management plan. Conditions 3.4.1 and 3.4.2 are within the permit to enable the Environment Agency to request the operator to submit and operate their installation in accordance with an approved noise management plan specific to the site if noise complaints for the facility are substantiated.</p>

The Local Authority Planning Department as well as the Health and Safety Executive, and Natural England were consulted on this application. However, consultation responses were not received from them.

The application was advertised externally on the GOV.UK website between 24 January and 21 February 2018 to invite any responses and comments from the general public. No responses were received.